The Nuclear Researchers Exchange Program FY2025

- Invitation -

Contents

Attachment 1 Application Form
A. Application ---------- (a)
A1. FNCA Research Course
A2. Individual Research Subject Course
A3. Basic Research Field Course
B. Candidate's Statement ---------- (b)
C. Official Statement ---------- (c)
D. Medical Certificate ---------- (d)

Attachment 2 List of Research Subjects
2-1 FNCA Research Course
2-2 Individual Research Subject Course
2-3 Basic Research Field Course

Additional note for researchers who stay for more than three months

A. About The Nuclear Researchers Exchange Program

Background

The Nuclear Researchers Exchange Program welcomes nuclear researchers from neighboring Asian countries to Japan.

This program was established in 1985, in conjunction with the Japanese policy of promoting cooperation with neighboring countries, and was based on the decision of the Atomic Energy Commission in December 1984.

This program enables Asian researchers to obtain the state-of-the-art technical knowledge and to perform high grade research activities in Japan, for contributing to build up and to strengthen nuclear base and nuclear safety in each Asian country.

This Program is linked to the Forum for Nuclear Cooperation in Asia (FNCA) (*).

(*) FNCA website: https://www.fnca.mext.go.jp/english/index.html

Basic Concept

In this program, Japanese research institutes and universities accept Asian researchers studying and working in the field for the peaceful use of nuclear energy.

B. Invitation for Asian Researchers

In FY2025, this program consists of 3 subject courses

(1) FNCA Research Course
(2) Individual Research Subject Course
(3) Basic Research Field Course

(1) FNCA Research Course

This Research course is set up for the researchers who currently engage in joint research and collaborative activities in the FNCA projects to advance their activities.

Invited Country (*1)

Australia (*2), Bangladesh, China, Indonesia, Kazakhstan, Republic of Korea (*2), Malaysia, Mongolia, the Philippines, Thailand and Vietnam

(*1) FNCA member countries are invited.

(*2) Participation at own expense.

1. Research Category and Subject

The Research Categories are directly linked to the FNCA 7 projects as follows. Applicants choose one research theme from the research theme list of FNCA Research Course. **(Attachment 2-1).**

1. Mutation Breeding (*)
2. Radiation Processing and Polymer Modification for Agricultural, Environmental and Medical Applications
3. Climate Change (Evaluating the Carbon Emission from Forest Soils)
4. Radiation Oncology
5. Research Reactor Utilization
6. Radiation Safety and Radioactive Waste Management (*)
7. Nuclear Security and Safeguards

(*) In FY2025 application, there is no research subject in this category.

2. Qualification for Application

This Research Course is set up for researchers who currently engage in joint research and collaborative activities in the FNCA projects.

3. Length of Assignment

The length of assignment is basically maximum 6 months.
The length of assignment is basically as follows: Maximum 6 months
MEXT and the accepting organizations will decide the actual term.
The term might be shortened due to the circumstances in Japan during the research period.
The term beyond FY2025 is not accepted.

4. Accepting Organization

In FY2025, the accepting organizations include as follows:

- Japan Atomic Energy Agency (JAEA)
- Kanagawa University
- Saitama Medical University
- The University of Tokyo
- Tokyo University of Agriculture and Technology

(2) Individual Research Subject Course

This course aims to develop researcher's capacity, providing expertise in the following areas associated with radiation utilization and nuclear power infrastructure. Participants carry out research on a subject which they applied for under supervision of an accepting researcher/professor.

Invited Country

Australia (*1), Bangladesh, China, Indonesia, Kazakhstan, Republic of Korea (*1), Malaysia, Mongolia, the Philippines, Sri Lanka, Thailand and Vietnam

(*1) Participation at own expense.

1. Research Fields

The research fields in this Course are linked to the fields of the FNCA projects as follows:

A. Radiation Utilization Development
B. Research Reactor Utilization Development
C. Nuclear Safety Strengthening
D. Nuclear Infrastructure Strengthening

2. Research Subject

Applicants choose one research subject from the theme list of **Attachment 2-2**. A participant carries out research under discussion with an accepting researcher/professor in charge.

3. Length of Assignment

The length of assignment is basically maximum 6 months.
MEXT and the accepting organizations will decide the actual term.
The term might be shortened due to the circumstances in Japan during the research period.
The term beyond FY2025 is not accepted.

4. Accepting Organization

In FY2025, the accepting organizations include as follows:

◆ **Research Institutes**
- Japan Atomic Energy Agency (JAEA)
- National Institutes for Quantum Science and Technology (QST)
- National Institute of Advanced Industrial Science and Technology (AIST)

◆ **Universities**
- Hirosaki University (Institute of Radiation Emergency Medicine)
- Hokkaido University
- Ibaraki University
- Institute of Science Tokyo
- Kyoto University (Institute for Integrated Radiation and Nuclear Science)
- Kyushu University
- Nagasaki University
- Nagoya University
- The University of Tokyo

(3) Basic Research Field Course

This Research Course can enable researchers and administrative technical officers to gain a general and systematical understanding in the field of FNCA projects.

In this course, a participant acquires systematic / broader/ deeper knowledge on each field and carries out research under the guidance and the field of an accepting researcher/professor in charge. Applicants choose one course from the list of **Attachment 2-3.**

Invited Country

Australia (*1), Bangladesh, China, Indonesia, Kazakhstan, Republic of Korea (*1), Malaysia, Mongolia, the Philippines, Sri Lanka, Thailand and Vietnam

(*1) Participation at own expense.

1. Research Field

The research fields in this Course are linked to the fields of the FNCA projects as follows:

1. Radiation Utilization Development
2. Research Reactor Utilization Development
3. Nuclear Safety Strengthening
4. Nuclear Infrastructure Strengthening

*Applicants are required basic and general knowledge on the field which they apply.

2. Length of Assignment

The length of assignment is basically maximum 3 months.
MEXT and the accepting organizations will decide the actual term.
The term might be shortened due to the circumstances in Japan during the research period.
The term beyond FY2025 is not accepted.

3. Accepting Organization

In FY2025, the accepting organizations include as follows.

- Fukushima University (Institute of Environmental Radioactivity)
- Hachinohe Institute of Technology
- Hokkaido University
- The University of Tokyo
- University of Fukui (Research Institute of Nuclear Engineering)

C. Qualification of Applicant

All applicants are required to:

(1) Be a researcher of a governmental or public research, educational or medical institute including a university engaged in research and development for the peaceful use of nuclear energy;
(Neither a student nor a professor is qualified.)
(2) Be a researcher who has graduated from a university or college and who is involved in research activities at the time of application;
(3) Be a nuclear researcher who could contribute to building up/strengthening nuclear base/nuclear safety in each country after returning to his/her country;
(4) Have sufficient skills in English and/or Japanese in both speaking and writing;
(5) In principle, be less than 50 years of age (Preference will be given to younger applicants);
(6) Be in physically and mentally good health to perform research activities in Japan;
(7) Be not accompanied by his/her family.
(8) Allow to be collected personal information for the procedures.

Number of Acceptance

Approximately 20 (*) researchers

(*) Number of acceptances may be subject to change under FY2025 budget by the Government of Japan.

Approximate numbers of applications in each country

Considering the actual numbers of accepted researchers from each country in recent years, the estimated numbers of applications from each country are as follows. We would appreciate the applicants to apply for each course.

Bangladesh	10	China (*1)	20	Indonesia (*1)	20	Kazakhstan	10
Malaysia	10	Mongolia	10	the Philippines	10	Sri Lanka	10
Thailand	10	Vietnam (*1)	20	Australia and Republic of Korea: No limitation			

(*1) As for the countries with two designated organizations (**Reference Table 2**), each estimated number of applications from each designated organization is 10.

D. Application Procedure, Notification of Results and Allowances

1. Application Procedure

(1) Completing Application Form

Applicants must complete the attached "Application Form (e-files)" and submit it to their home organizations. Each home organization checks the application forms and submits them with their photo to the designated organization in each country (***Reference Table 2***).

We advise each home organization to send the application forms early enough for each designated organization to organize the applications before sending to NSRA, Japan.

Notices of completing "Application Form"

1) **A copy of one recent paper** written by each applicant on the relevant theme should be attached to his/her application.
2) **Official Statement of Home Organization** by an applicant's direct supervisor or the equivalent person should be attached.

(2) Sending Application Form to Japan

Each designated organization in each country are requested to select the nominees by checking all the applications, and the contact person of each designated organization is requested to send the application forms (e-files) of selected nominees and "Letter of Recommendation" signed by the FNCA Coordinator of the country (for the designated organizations which FNCA Coordinators belong to) or the Chairman of Nuclear Energy Authority/Commission (for the other designated organizations or non-FNCA member country) to Nuclear Safety Research Association (NSRA) by e-mail ***no later than March 21, 2025. (Punctuality is strongly recommended!)***

Addressee: Ms. TAKEMURA Kyoko
General Manager
International Affairs and Research Department
Nuclear Safety Research Association (NSRA)
E-mail: iard@nsra.or.jp

2. Notification of the results

(1) MEXT/NSRA selection committee consisted of the experts and each accepting organization in Japan will carefully select applicants to be invited to Japan based on the research plan. In the decision of the final selection, other information (balance of numbers of accepted researchers from each country, balance among research category, age, and experiences of participating in this Program and/or the other MEXT programs) will be considered. **Preference will be given to younger applicants, applicants who have no experience or only a few experiences in participating in MEXT programs.**

(2) The results of selection will be notified by MEXT to the each designated organization by

around July 2025.

(3) Each successful applicant to be invited to Japan will be notified, at the same time as each designated organization will be informed, of the invitation details, including the term and the date of entry to Japan.

(4) Those who received the notice of acceptance must not cancel the nomination except for the unavoidable reason. Neither temporary return nor traveling abroad is allowed during your invitation period except for an unavoidable reason or in an emergency.

(5) The information in the Nuclear Researchers Exchange Program for the FY2025 is subject to change due to the unexpected situation (e.g. COVID-19, etc.).

3. Transportation, Allowance and Accommodation, etc

The following will be borne by MEXT

(1) Transportation

- Economy class round-trip air ticket (from the international hub airport for Japan)
- Round-trip travel expenses between the arrival airport and the host organization in Japan

(2) Allowance

- Daily allowances (JPY4,400) from the date of arrival in Japan through the date of departure from Japan.

(3) Accommodation

- Furnished single room (The applicant must not be accompanied by his/her family)

4. Personal Agreement

The home organization of each researcher and the researcher himself/herself are to conclude an agreement covering obligations and responsibilities of the researcher with each host organization.

Reference Table 1
The Accepting Organizations in Japan

◆ Research Institutes

JAEA) Japan Atomic Energy Agency
HQ) 765-1 Funaishikawa, Tokai-mura, Naka-gun, Ibaraki, 319-1184, Japan Site) Oarai, Tokai, Tsuruga
QST) National Institutes for Quantum Science and Technology
HQ) 4-9-1, Anagawa, Inage-ku, Chiba-shi, Chiba, 263-8555, Japan Site) Inage, Takasaki
AIST) National Institute of Advanced Industrial Science and Technology
HQ) Central 2, 1-1-1 Umezono, Tsukuba, Ibaraki, 305-8568, Japan

◆ Universities

Fukushima University
1 Kanayagawa, Fukushima-shi, Fukushima, 960-1296, Japan
Hachinohe Institute of Technology
88-1, Myo Ohbiraki, Hachinohe, 031-8501, Japan
Hirosaki University (Institute of Radiation Emergency Medicine)
66-1 Hon-cho, Hirosaki-shi, Aomori, 036-8564, Japan
Hokkaido University
Kita8, Nishi5, Kita-ku, Sapporo-shi, Hokkaido, 060-0808, Japan
Ibaraki University
Mito: 2-1-1, Bunkyo, Mito, 310-8512, Japan Tokai: 162-1, Shirakata, Tokai, Naka, 319-1106, Japan
Institute of Science Tokyo (Laboratory for Zero-Carbon Energy)
2-12-1, Ookayama, Meguro-ku, Tokyo,152-8550, Japan
Kanagawa University
Rokukakubashi 3-27-1, Kanagawa-ku, Yokohama-shi, Kanagawa, 221-8686, Japan

Kyoto University (Institute for Integrated Radiation and Nuclear Science)
Kumatori-cho, Sennan-gun, Osaka, 590-0494, Japan
Kyushu University
744, Motooka, Nishi-ku, Fukuoka-shi, Fukuoka, 819-0395, Japan
Nagasaki University
Sakamoto 1-12-4, Nagasaki, 852-8523, Japan
Nagoya University
Furo-cho, Chukusa-ku, Nagoya-shi, Aichi, 464-8601, Japan
Saitama Medical University
38 Morohongo Moroyama-machi, Iruma-gun, Saitama 350-0495, Japan
The University of Tokyo
Graduate School of Engineering, MALT) 7-3-1, Hongo, Bunkyo-ku, Tokyo, 113-0033, Japan Graduate School of Frontier Sciences) 5-1-5 Kashiwanoha, Kashiwa-shi, Chiba, 277-8561, Japan
Tokyo University of Agriculture and Technology
3-5-8 Saiwai-cho, Fuchu-shi, Tokyo 183-8509, Japan
University of Fukui (Research Institute of Nuclear Engineering)
1-2-4, Kanawacho, Tsuruga-shi, Fukui,914-0055, Japan

For any questions about the application guide, please contact with NSRA by e-mail at iard@nsra.or.jp.

Reference Table 2
The Designated Organizations and Contact Persons

Australia	**Ms. Natascha SPARK** ANSTO Locked Bag 2001, Kirrawee DC, NSW 2232, AUSTRALIA tel: +61-2-424 782 144 e-mail: sparkn@ansto.gov.au
Bangladesh	**Dr. Md. Idris Ali** Director International Affairs Division & NLO to the IAEA Bangladesh Atomic Energy Commission (BAEC) E-12/A, Agargaon, Sher-e-Bangla Nagar, Dhaka-1207, BANGLADESH tel: +880 2 222218419 cell: +880-1926182535 e-mail: miali6691@gmail.com; nlo.baec@gmail.com
China	**China Atomic Energy Authority (CAEA)** **Mr. BAI Yufei** Project Officer Department of International Cooperation A8, Fucheng Road, Haidian District, Beijing, 100048, P.R. CHINA tel: +86-10-88581067 e-mail: baiyufei_caea@163.com
	National Nuclear Safety Administration (NNSA) **Mr. BIE Chao** Deputy Director of International Cooperation on Nuclear Safety Department of International Cooperation National Nuclear Safety Administration Ministry of Ecology and Environment of the P.R.C No.12, East Chang'an Avenue, Dongcheng District, Beijing, 100006, CHINA tel: +86-10-65645798 fax: +86-10-66645794 e-mail: bie.chao@nro.mee.gov.cn
Indonesia	**National Research and Innovation Agency (BRIN)** **Mr. Totti Tjiptosumirat** National Liaison Officer of Indonesia **Ms. Ros Intan Purbasari** Senior staff of Bureau for Legal and Cooperation **Mr. Dimas Irawan** Nuclear Energy Policy Analyst Jalan M.H. Thamrin No. 8, Central Jakarta, 10340, INDONESIA tel: + 62 811-1064-6843 ; +62 811-1933-3639 e-mail: tott001@brin.go.id, rosi007@brin.go.id, dimas.irawan@brin.go.id

	Nuclear Energy Regulatory Agency (BAPETEN) **Mr. Auzan Shadiq** Policy Analyst, Legal Affairs, Cooperation, and Public Communication Bureau Jl. Gajah Mada No.8, Jakarta10120, INDONESIA tel: +62-21 63858269-70 e-mail: a.shadiq@bapeten.go.id
Kazakhstan	**Ms. Nurgul Kurmangaliyeva** Head of International Project Support Group, Department of Public Relations National Nuclear Center (NNC) of the Republic of Kazakhstan 2B, Beibyt atom st., Kurchatov, 180010, KAZAKHSTAN tel:+7-722-51-3-33-33 mobile:+77051357008 e-mail: nurgulya@nnc.kz
Republic of Korea	**Mr. LEE Jeong-kong** International Cooperation Team Korea Atomic Energy Research Institute (KAERI) 105-1 Deokjin-Dong, Yuseong, Daejeon, KOREA tel: +82-42-868-8248 e-mail: jklee4@kaeri.re.kr **Ms. Teresa W. Na** Team Leader, International Affairs and Coordination Team Korea Institute of Radiological & Medical Sciences (KIRAMS) 215-4 Gongneung-Dong, Nowon-Gu, Seoul, KOREA tel: +82-2-970-1740 e-mail: wkna@kirams.re.kr
Malaysia	**Malaysian Nuclear Agency (Nuclear Malaysia)** **Mr. Zakaria Dris** Director, Human Resources Development Division **Ms. Azhani Mohd Razali** Research Officer, Human Resources Development Division Bangi, 43000 Kajang, Selangor, MALAYSIA tel: +60-3-8911-2000 e-mail: zakariadris@nm.gov.my, azhani@nm.gov.my
Mongolia	**Ms. GERELMAA Gombosuren** Acting Head of the Foreign Affairs Division Executive Office of Nuclear Energy Commission (NEC Khan-Uul District-20, Uildverchdiin street-2, Ulaanbaatar, 17032, MONGOLIA tel: +976-51-267158 Mobile: +976-99087979 e-mail: g.gerelmaa@nea.gov.mn, office@nea.gov.mn
The Philippines	**Mr. Gilbert PORALAN** Section Head, International Cooperation Section, Technology Diffusion Division DOST-Philippine Nuclear Research Institute (DOST-PNRI) Commonwealth Ave., Diliman, Quezon City 1101, The PHILIPPINES tel: + 632-89296011 to 19 ext. 258 e-mail: gmporalanjr@pnri.dost.gov.ph, ics@pnri.dost.gov.ph

Sri Lanka	**Mr. H.M.N.R. Bandara** Director, International Cooperation Division National Liaison Officer to IAEA - TC Sri Lanka Atomic Energy Board 60/460, Baseline Road, Orugodawatta, Wellampitiya, SRI LANKA tel. +94-11-207 5230 (Direct), +94-11-253 3427-8, +94-71- 858 3132 (Mobile/WhatsApp) e-mail: bandara@aeb.gov.lk, bandaraaea72@gmail.com
Thailand	**Thailand Institute of Nuclear Technology (Public Organization)** **Ms. Chatchawan Mansaithong** International Cooperation Officer, Professional Level **Ms. Worada Jarupoonphol** International Cooperation Officer 9/9 Moo 7, Saimoon Sub-district, Ongkarak District, Nakhon Nayok 26120, THAILAND tel. +66 2 401 9889 ext. 1196 e-mail: chatchawan@tint.or.th, worada.jar@tint.or.th
Vietnam	**Vietnam Atomic Energy Institute (VINATOM)** **Ms. Tran Ngoc Hoan** Deputy Director of International Cooperation Department **Ms. Pham Thanh Huong** International Cooperation Department 59 Ly Thuong Kiet str., Hoan Kiem dis., Ha Noi City, VIETNAM tel: +84-979-371787 e-mail: hoantran1311@gmail.com, phamthanhhuong.139@gmail.com
	Vietnam Agency for Radiation and Nuclear Safety (VARANS) **Ms. Bui Thi Thuy Anh** Deputy Director, Division of Legislation and International Cooperation 14th Floor, Headquarter of Ministry of Science and Technology, 113 Tran Duy Hung Str., Hanoi, VIETNAM tel: +84-24-39410213 cell: +84-9-04532218 e-mail: btanh@most.gov.vn

(for NSRA use)	Plan	Result	**FR-25 -**
			Date

MEXT	**Research Code No.**
Nuclear Researchers Exchange Program FY2025	
*Application for **INVITATION** to JAPAN*	
(1) FNCA Research Course	

1. Profile

NAME (as printed in PASSPORT) If you have two last or first names, leave a space between them.

FAMILY (SUR) Name ONLY	First and Middle Name(s)	*Chinese characters, if you have.*

Passport No.	***Nationality***		***Gender***	***Marital Status***
	Place of Birth		***F: Female***	***S: Single***
expiry date yy/ mm/ dd	*(in Chinese character)*		***M: Male***	***M: Married***
	Date of Birth	yy/ mm/ dd		

Home Address (address where you are living)	*Town/City*	*Province*	*Post code*
	(Chinese characters, if any)		

Tel		Mobile		Fax	
E-mail 1 *e.g. tom@gmail.com*					
E-mail 2 *e.g. tom@nsra.or.jp*					

Current Employment

Organization	
Position / Division	
Office Address	*(※)Neither P.O.Box nor G.P.O.Box are available*

Town/City *Province* *Post code*

Tel		Fax	

Your Direct Supervisor

Name		Position	
Tel		Fax	
E-mail			

Emergency Contact

Name		Relationship	
Address			
Tel		Fax	
E-mail			

2. Research Theme	
(Code No.)	Research Theme

3. Term of stay you desire (for reference) ***The term beyond FY2025 (March 2026) is not accepted**

FROM: 2025/ ☐ month/ ☐ date

TO: 20 _/ ☐ month/ ☐ date

4. Research Plan (Describe detailed research plan)

5. The current research related to this FNCA project	
Theme	
Institute	
Period	yy/ mm/ dd - yy/ mm/ dd
(Details)	

6. The reason why you apply for this program

7. How is this experience made the best use of?

8. Language Ability

Can you perform the research/training in English and/or Japanese in Japan?

→ ☐ 1. YES 2. NO

(1) Test Score (English & Japanese)

*TOEIC		☐
*TOEFL		☐
*Others [	]	☐
[	]	☐

(2) Classify your proficiency of language ability from A to C and enter it into the boxes:

A. Excellent (Fully Comprehension)
B. Good (Moderate Comprehension)
C. Poor (Have Difficulty)

	English	**Japanese**
* *Listening*	☐	☐
* *Speaking*	☐	☐
* *Writing*	☐	☐
* *Reading*	☐	☐

9. Research Experience(including post graduate studies, studies abroad)		
From	To	Organization/Place/Country
Subject		
From	To	Organization/Place/Country
Subject		

10. Thesis or Paper (List any published materials)		
Date	Title	Bibliographical Data

11. Education			
Name of Institution	Field of Study	Diploma/Degree	Date earned or expected

12. Employment History		
From	To	Organization/Place/Country
Subject		
From	To	Organization/Place/Country
Subject		

(for NSRA use)	Plan	Result	IR-25-
			Date

MEXT ***Nuclear Researchers Exchange Program FY2025*** *Application for* ***INVITATION*** *to JAPAN* (2) Individual Research Subject Course	**Research Code No.**

1. Profile

NAME (as printed in PASSPORT) If you have two last or first names, leave a space between them.

FAMILY (SUR) Name ONLY	First and Middle Name(s)	*Chinese characters, if you have.*

Passport No.	***Nationality***		***Gender***	***Marital Status***
	Place of Birth		***F: Female***	***S: Single***
expiry date	*(in Chinese character)*		***M: Male***	***M: Married***
yy/ mm/ dd	***Date of Birth***	yy/ mm/ dd		

Home Address (address where you are living)	*Town/City* *(Chinese characters, if any)*	*Province*	*Post code*

Tel		Mobile		Fax	
E-mail 1 *e.g. tom@gmail.com*					
E-mail 2 *e.g. tom@nsra.or.jp*					

Current Employment

Organization	
Position / Division	
Office Address	*(※)Neither P.O.Box nor G.P.O.Box are available*
Town/City	*Province* *Post code*
Tel / Fax	

Your Direct Supervisor

Name		Position	
Tel		Fax	
E-mail			

Emergency Contact

Name		Relationship	
Address			
Tel		Fax	
E-mail			

2. Research Theme	
(Research Code No.)	Research Theme

3. Term of stay you desire (for reference) ***The term beyond FY2025 (March 2026) is not accepted**

FROM: 2025/ [ ] month/ [ ] date

TO: 20 _/ [ ] month/ [ ] date

4. Research Plan (Describe detailed research plan)

5. The reason why you apply for this program

6. How is this experience made the best use of?

7. Language Ability

Can you perform the research/training in English and/or Japanese in Japan?

→ ☐ 1. YES 2. NO

(1) Test Score (English & Japanese)

*TOEIC		☐
*TOEFL		☐
*Others [	]	☐
[	]	☐

(2) Classify your proficiency of language ability from A to C and enter it into the boxes:

A. Excellent (Fully Comprehension)
B. Good (Moderate Comprehension)
C. Poor (Have Difficulty)

	English	**Japanese**
* *Listening*	☐	☐
* *Speaking*	☐	☐
* *Writing*	☐	☐
* *Reading*	☐	☐

8. Research Experience(including post graduate studies, studies abroad)		
From	To	Organization/Place/Country
Subject		
From	To	Organization/Place/Country
Subject		

9. Thesis or Paper (List any published materials)		
Date	Title	Bibliographical Data

10. Educational Background (Starting from undergraduate level of university)				
Name of Institution/School	Location	Field	Diploma/Degree	Graduation Year

11. Employment History		
From	To	Organization/Place/Country
Subject		
From	To	Organization/Place/Country
Subject		

(for NSRA use)	Plan	Result	BR-25 -
			Date

MEXT ***Nuclear Researchers Exchange Program FY2025*** *Application for* ***INVITATION*** *to JAPAN* (3) Basic Research Field Course	**Code No.**

1. Profile

NAME (as printed in PASSPORT) If you have two last or first names, leave a space between them.

FAMILY (SUR) Name ONLY	First and Middle Name(s)	*Chinese characters, if you have.*

Passport No.	***Nationality***		***Gender***	***Marital Status***
	Place of Birth		***F: Female***	***S: Single***
expiry date	*(in Chinese character)*		***M: Male***	***M: Married***
yy/ mm/ dd	***Date of Birth***	yy/ mm/ dd		

Home Address (address where you are living)	*Town/City* *(Chinese characters, if any)*	*Province*	*Post code*

Tel		Mobile		Fax	
E-mail 1 *e.g. tom@gmail.com*					
E-mail 2 *e.g. tom@nsra.or.jp*					

Current Employment

Organization	
Position / Division	
Office Address	*(※)Neither P.O.Box nor G.P.O.Box are available*
Town/City	*Province* *Post code*

Tel		Fax	

Your Direct Supervisor

Name		Position	
Tel		Fax	
E-mail			

Emergency Contact

Name		Relationship	
Address			
Tel		Fax	
E-mail			

2. Field you desire	
(Code No.)	Field

3. The reason why you apply for this program AND the background which your country or institute wish to dispatch you to Japan under this program

4. Your contribution can be made to build up/strengthen nuclear base/nuclear safety of your county

5. Language Ability

Can you perform the research/training in English and/or Japanese in Japan?

→ ☐ 1. YES 2. NO

(1) Test Score (English & Japanese)

*TOEIC		☐
*TOEFL		☐
*Others [	]	☐
[	]	☐

(2) Classify your proficiency of language ability from A to C and enter it into the boxes:

A. Excellent (Fully Comprehension)
B. Good (Moderate Comprehension)
C. Poor (Have Difficulty)

	English	**Japanese**
* *Listening*	☐	☐
* *Speaking*	☐	☐
* *Writing*	☐	☐
* *Reading*	☐	☐

6. Employment History		
From	To	Organization/Place/Country
Subject		
From	To	Organization/Place/Country
Subject		
From	To	Organization/Place/Country
Subject		
From	To	Organization/Place/Country
Subject		

7. Educational Background (Starting from undergraduate level of University)			
Name of Institution/School	Field of Study	Diploma/Degree	Date earned or expected

Candidate's Statement

I certify that the statements below are true and correct. If selected as a research fellow under the Nuclear Researchers Exchange Program, I undertake to:

1. conduct myself always in a manner compatible with my status:
2. refrain from engaging in political or commercial activities or any other activities not to related to the research program:
3. accept no remuneration other than the exchange program stipend nor render any service for pay:
4. return to my country on completion of my research:
5. refrain from declining the nomination, and
6. refrain from using the information obtained in Japan except for the peaceful use of nuclear energy.

Date: _____

Name in print (block letter): _____

Signature: _____

Official Statement of Institute/Organization

By the Candidate Direct Supervisor

Candidate		
(First Name)	(Middle Name)	(Last Name)
Official Nomination		
1.Institute's present state of research needs and expectations for the Exchange Program:		
2.Expected contributions of the candidate to the future of the institute:		

The _____
(Name of the Institute)

nominates _____
(Name of the Candidate)
as a candidate for Nuclear Researchers Exchange Program, notes the above statements, and gives assurance that:

1. all the information given by the candidate is true and correct;

2. The Ministry of Education, Culture, Sports, Science and Technology (MEXT) and the host organization have no financial responsibility for incidental expenses connected with travel incident in the research work, or for death, injury, sickness, or the other disability arising from participating in research;

3. the position of the nominee will be retained during his/her absence and he/she will continue to receive, during the period of the research work in Japan, a salary and related emoluments enabling him/her to commitment to his/her home country.

The Candidate's Direct Supervisor

Date _____

Name in print _____

Position _____

Signature _____

INSTRUCTIONS: This report shall be completed in duplicate by a registered physician after through clinical and laboratory examination, including a chest X-ray. The Ministry of Education, Culture, Sports, Science and Technology (MEXT) reserves the right to require the candidate to undergo further medical examinations, if necessary.

Record of candidate's occupational radiation exposure shall be attached herewith.

Medical Certificate	**2025 MEXT Nuclear Researchers Exchange Program**

First Name	Last Name

Address:

Age: Gender: (Female / Male)

Height: _____ cm Weight: _____ kg

Medical Report	
ATTENTION: Please Describe Specifically.	
1	Describe candidate's present health condition.
2	Does the candidate show any PHYSICAL deficiencies that would limit his/her performance? Yes No If yes, please explain.
3	Does the candidate show any MENTAL deficiencies that would limit his/her performance? Yes No If yes, please explain.
4	Does the candidate have a history of illness or disorders that would limit his/her ability to research conduct researches? Yes No If yes, please explain.
5	List any infectious diseases that the candidate might be carrying.
6	Describe any present condition or illness that would require the candidate to seek medical treatment while participation in the research program.

I hereby certify that the above statements are true and correct.

Date: _____

Signature: _____

Physician:

Clinic:

Address:

MEXT Nuclear Research Exchange Program 2025 - FNCA Research Course

Research Code No.	Research Theme	Summary of Research	Organization	Duration (Months) (*)	Capacity (Persons)	Qualification for Application
1. Radiation Processing and Polymer Modification for Agricultural, Environmental and Medical Applications						
FR - 1	Bio-Stimulant Microorganisms for Crops	The effects of microbial bio-stimulants on crops and improvement of the effectiveness and application technologies using radiation. Basic knowledge on molecular biology, microbiology, plant physiology will be provided through lab work and literature review.	Tokyo University of Agriculture and Technology Institute of Agriculture (Tokyo)	3	1	・Bachelor's degree in agriculture, science and technology
2. Climate Change (Evaluating the Carbon Emission from Forest Soils)						
FR - 2	Study on soil organic carbon cycle using stable and radioactive carbon isotope analysis	Understanding the soil organic carbon dynamics is the key to predicting the future climate change. In this study, we conduct field and laboratory experiments to evaluate the storage and decomposition processes of soil organic carbon and their responses to global warming, using stable and radioactive carbon isotope analysis.	JAEA Research Group for Environmental Science, Chemistry, Environment, and Radiation Division, Nuclear Science and Engineering Center (Tokai)	2	1-3	・Master's degree in science and technology, or Bachelor's degree in science and technology
FR - 3	Radiocarbon dating of soil sediment samples by accelerator mass spectrometry	Under the FCNA project, "Evaluating the Carbon Emission from Forest Soils", the radiocarbon (C-14) dating of the soil samples collected from each participating country is conducted by the Accelerator Mass Spectrometry. The concept and technique of the radiocarbon dating will be learned by a training program: 1) Extraction and purification of carbon dioxide from soil, 2) Accelerator Mass Spectrometry, 3) Data analysis.	The University of Tokyo MALT (Micro Analysis Laboratory, Tandem accelerator) (Hongo)	3	2	・Basic knowledge of mathematics, physics and chemistry with the level of the 1st grade of the university

3. Radiation Oncology						
FR - 4	High-precision radiotherapy for predominant cancers in Asia	Optimum treatment for predominant cancers in Asia will be established using high-precision radiotherapy including IMRT, SBRT, MRI-guided RT, and 3D-IGBT.	Saitama Medical University Department of Radiation Oncology, International Medical Center (Hidaka)	2.5	1-2	・Radiation oncologist and/or medical physicist engaged in radiotherapy
4. Research Reactor Utilization						
FR - 5	Chemical characteristics of geological and cosmochemical samples	Metal elements abundances are determined in geological and cosmochemical samples by using neutron activation analysis (PGA and INAA) and/or ICP-MS. Based on the obtained analytical results, the behavior of metal elements abundances will be investigated during their formation process.	Kanagawa University Faculty of Science (Yokohama)	5	1	・Master's degree in science and technology ・Experience in organic analytical chemistry

5. Nuclear Security and Safeguards						
FR - 6	Enhancing Capacity on Nuclear Security	The research focuses on the implementation and capacity building of the specific topic on nuclear security to enhance human capacity of the nominee's country on nuclear security. Research topics ; Physical protection, Nuclear security culture, Training curriculum development, etc.	JAEA Integrated Support Center for Nuclear Nonproliferation and Nuclear Security (Tokai)	up to 2	1-2 in total	・Working experience in the field of nuclear security
FR - 7	Enhancing Capacity on Safeguards(SG)	The research focuses on the implementation and capacity building of the specific topic on Safeguards(SG) to enhance human capacity of the nominee's country on SG. Research topics ; State Systems of Accounting for and Control of Nuclear Material(SSAC), Non-Destructive Assay (NDA) of Nuclear Materials, Nuclear Material Accountancy, Additional Protocol, etc.		up to 2		・Working experience in the field of SG

MEXT Nuclear Research Exchange Program 2025 - Individual Research Subject Course

Research Code No.	Research Theme	Summary of Research	Organization	Duration (Months) (*)	Capacity (Persons)	Qualification for Application
A: Radiation Utilization Development						
A - 1	Development of high-performance polymer membrane materials using radiation techniques	High-performance polymer membranes, applied for environment and energy devices such as fuel cells, secondary battery, and water electrolyzer, will be developed based on the synthesis by radiation-induced crosslinking and graft polymerization methods and structure analysis by X-ray/neutron scattering techniques.	QST Nanostructured Polymer Materials Project (Takasaki)	5	1	・Bachelor's degree in science and technology
A - 2	Biokinetics analysis of RI for targeted nuclide therapy	Using the python language-based program for biokinetics, we will evaluate the biokinetics of radiopharmaceutical suitable for targeted nuclide therapy and clarify the characteristics on dosimetry.	QST Medical Radioisotope Applications Project (Takasaki)	5	1	・Bachelor's degree in engineering and pharmacy
A - 3	Research and development of novel type radioprotective agents and mitigators	By using mouse models for radiation-induced bone marrow death and gastro-intestinal death, biochemicals bearing cell death inhibition or modulation function will be verified as candidates for new type of radioprotectors and mitigators, in particular, against high-LET heavy ion irradiations.	QST Department of Radiation Effects Research, Institute for Radiological Science (Inage)	5	2	・Work experience in biology or toxicology ・Not being allergic to laboratory animals (mice)

A - 4	Correction coefficients in standard measurements for dosimetry	Experience standard measurements for dosimetry using the primary standard devices, such as ionization chambers and calorimeters, and derive correction coefficients through measurements or simulation calculations.	AIST Ionizing Radiation Standard Group, Research Institute for Measurement and Analytical Instrumentation, National Metrology Institute of Japan (Tsukuba)	3	1	・Bachelor's degree in science and technology ・Engaged in radiation measurement
A - 5	Environmental dynamics of anthropogenic iodine-129 by accelerator mass spectrometry	Iodine-129 is a long-lived radioisotope (half-life = 1.57E+07 yr.) and a typical fission product of Uranium. It is mainly originated from atmospheric nuclear weapon testing, spent nuclear fuel reprocessing, and nuclear power plant accidents. In this program, deposition and dynamics of anthropogenic Iodine-129 in environmental samples (e.g., soil, seawater, corals, etc.) are investigated. Through the exercises: 1) extraction of iodine, 2) fundamental analysis (ICP-MS, etc.), 3) accelerator mass spectrometry, 4) presentation and discussion, experimental techniques required for environmental analysis using accelerator mass spectrometry and interpretation of resulting data will be mastered.	The University of Tokyo MALT (Micro Analysis Laboratory, Tandem accelerator) (Hongo)	4.5	2	・Basic knowledge of mathematics, physics and chemistry with the level of the 1st grade of the university

A - 6	Evaluation of the ground stability and the history of geomorphological variation using Berylliumu-10	Cosmogenic radio nuclide Beryllium-10 produced in the quartz in the crust is a good indicator for the evaluation of the denudation rate of the surface and the history of geomorphological variation (buried and exposure). It is used for the evaluation of the ground stability of the location for a nuclear facility. In this training program, the ground stability evaluation method using Beryllium-10 will be learned via 1) Extraction of quartz from rock samples, 2) Beryllium extraction form the quartz, 3) Measurement of Beryllium-10 by Accelerator Mass Spectrometry, 4) Data analysis.	The University of Tokyo MALT (Micro Analysis Laboratory, Tandem accelerator) (Hongo)	4.5	1	・Basic knowledge of mathematics, physics and chemistry with the level of the 1st grade of the university
A - 7	Two-phase flow measuremenet using radioation transmission imaging	Radiation imaging techniques are useful for understanding thermal-hydraulic phenomena. X-ray imaging method is applied to measure gas-liquid two-phase flow phenomena, and fundamental understanding on the radiation imaging techniques will be obtained.	Kyoto University Institute for Integrated Radiation and Nuclear Sciences (Kumatori)	3	1	・Bachelor's or Master's degree in science and technology
A - 8	Research on Mo-99 production using hot atoms	Study on possibility for Mo-99 (medical radioisotope) production by hot atoms using PHITS code.	Ibaraki University Research and Education Center for Atomic Sciences (Tokai or Mito)	2	1	・Master's degree in science and technology

B: Research Reactor Utilization Development						
B - 1	Materials Science Research Using Neutron Scattering	Materials science study on magnetism and electronic properties using neutron scattering techniques available in the research reactor JRR-3 of JAEA	Ibaraki University Research and Education Center for Atomic Sciences (Tokai)	3	1	・Bachelor's degree in science and technology ・Participants must be under radiation control at their Institution because of requirement to access the JRR-3 facility.
B - 2	Materials Science in Nuclear Fuel Cladding	This research will focus on materials science in fuel cladding or structural components for light water reactors. It includes mechanical property measurements, microstructure observations, corrosion, hydrogenation, or irradiation experiments. Issues in regulation that relate to materials engineering can be included upon request.	The University of Tokyo Department of Nuclear Engineering and Management, Graduate School of Engineering (Tokai)	6 or less	1-2	A degree or experience in materials science and engineering.
B - 3	Materials Science in Fusion Blanket	This research will focus on materials science in fuel cladding or structural components for fusion reactors. It includes mechanical property measurements, microstructure observations, corrosion, hydrogenation, or irradiation experiments.	The University of Tokyo Department of Nuclear Engineering and Management, Graduate School of Engineering (Tokai)	6 or less	1-2	A degree or experience in materials science and engineering.

C: Nuclear Safety Strengthening

C - 1	R&D for NPP Decommissioning	Conduct research and technological development to solve various issues related to the promotion of decommissioning of nuclear power plants. In decommissioning, it is necessary to cooperate not only between departments but also with local governments, prefectures and the national government in order to formulate and execute a planned dismantling process schedule. In addition, radiation management / inventory evaluation, maintenance management of existing facilities, work management, selection / verification of dismantling methods, radioactive waste treatment / disposal, clearance / reuse measures for dismantled materials, national legal system and various approvals, Furthermore, there are a wide range of tasks such as increasing employee motivation and introducing advanced technologies (IT, VR, AR, etc.). These are complex problems and system-theoretic problems. Each is closely related and a simple solution is not enough. Approaches from various perspectives for these solutions are necessary as specific and general remarks. An applicant will select these issues who can show their abilities and work on solving various issues through research or training. In this way, an aplocant will find out the issues of decommissioning from an international perspective, and clarify the viewpoint and solution method of technological development of decommissioning in the future.	JAEA Fugen Decommissioning Engineering Center (Tsuruga)	1	1	・ Logical thinking ・ Critical thinking ・ Attitude to actively and proactively tackle issues ・ Sufficient knowledge of the field

C - 2	Study on chemical structural analysis of actinide complex in biological fluids	This study aims to the analysis on the Incorporation mechanism of actinide to biological fluids based on structural chemical point of view, and development of the decorporation of actinides by chelating agents. X-ray absorption spectrum by synchrotron radiation is measured and local structure of actinides with ligands by analyses of the data is obtained.	QST Internal Decorporation Research Group, Institute for Radiological Science (Inage)	3	1	・Have experience in radiation worker training and radiation work. ・Possess knowledge equivalent to or above that of a bachelor degree level in science or engineering.
C - 3	Study on single-cell/sub-cellular targeting and analysis of defensive cellular responses in human cells using microbeam irradiation technology.	This research aims to elucidate the mechanisms of defensive cellular responses to radiation in normal and cancer cells using the SPICE proton microbeam, which enables targeted irradiation and tracking of individual cells. In addition to understanding the advantageous features of microbeam irradiation technology, the research will focus on acquiring fundamental knowledge of radiation biological experimental techniques, the use of various microscopes, and image processing and analysis methods for obtained cellular images.	QST Internal Decorporation Research Group, Institute for Radiological Science (Inage)	3	1	・Have experience in radiation worker training and radiation work. ・Possess knowledge equivalent to or above that of a bachelor degree level in science or engineering.

C - 4	Re-evaluation of cytogenetic biodosimetry in radiation emergency medicine	At present, chromosomal abnormalities, in particular, dicentrics, translocations and micronucleus, are used for dose estimation after radiation exposure accidents. A series of processes from blood sampling to chromosome analysis will be re-examined in order to perform more accurate dose estimation. In addition, an inter-laboratory comparison of the updated methodology will be conducted.	Hirosaki University Department of Risk Analysis and Biodosimetry, Institute of Radiation Emergency Medicine (Hirosaki)	5.5	2	・Bachelor's or Master degree in biology or life science ・Engaged or applicant in biodosimetry
C - 5	Development of new marker(s) in biological dosimetry in radiation emergency medicine	In radiation exposure accidents, chromosomal aberrations are used for radiation dose assessment in exposed person. Although this technique has been used for more than 60 years, there is an urgent need to develop new markers and dosimeters that correlate to chromosomal abnormalities. In order to more quickly and accurately evaluate radiation dose, it will be necessary to analyze genetic changes and discover new markers and dosimeters in human cells induced by radiation exposure.	Hirosaki University Department of Risk Analysis and Biodosimetry, Institute of Radiation Emergency Medicine (Hirosaki)	5.5	1-2	・Bachelor's or Master degree in biology or life science ・Engaged or applicant in biodosimetry
C - 6	Evaluation of activity concentrations for natural nuclides such as radon and uranium and the dose estimation due to their inhalation and ingestion	Activity concentrations of the natural occurring radioactive materials (NORM) such as radon and uranium will be measured to understand their environmental dynamics. The internal and external doses derived from these nuclides will be comprehensively estimated from view point of radiation protection.	Hirosaki University Department of Radiation Measurement and Physical Dosimetry, Institute of Radiation Emergency Medicine (Hirosaki)	5.5	2	・Bachelor's degree in science and technology ・Engaged in radiation measurement

C - 7	Method development of man-made radionuclides in environmental and biological samples	Anthropogenic radionuclides, such as Cs-137, Sr-90, and I-129, are existing in the environment as a consequence of the accidents of nuclear related facilities and atomic bomb testing. For the assessment of influence from the nuclear power plant, establishment of environmental monitoring is necessary before and during the operation of power generation. Chemical sample pretreatment and radiometric detection technique will be investigated for rapid and quantitative determination of radioactivity. In addition, ICP-mass spectrometry will be used, which is useful for determination long-lived radionuclides such as uranium isotopes.	Hirosaki University Department of International Cooperation and Collaborative Research, Institute of Radiation Emergency Medicine (Hirosaki)	5.5	2	・Bachelor's degree in science and technology ・Engaged in radiation measurement
C - 8	Environmental assessment of radionuclides from the nuclear related facilities	Energy demand continues to grow in the Asia, where is dotted with numerous nuclear facilities. The risk of radioactive contamination is not only domestic but international issue, especially trans-boundary air pollution. To assess influence from the nuclear related facility, collecting aerosol sample and other environmental samples and analysis for volatile radionuclides such as I-129, H-3 and C-14 are needed. In this study, method for environmental monitoring for radionuclide will be developed.	Hirosaki University Department of Radiochemestry and Radioecology, Institute of Radiation Emergency Medicine (Hirosaki)	5.5	1	・Bachelor's degree in science and technology ・Engaged in radiation measurement

C - 9	Nuclear Waste Managements	Bentonite, of which major mineral is montmorillonite, is well-known clay material suitable for buffer-barrier in a landfill or a nuclear waste repository, due to its low-permeability, high-expandability, and high-sorption ability for heavy metals or radioisotopes. However, sorption and diffusion behaviors of contaminants in the clay have not been fully understood. In this research, mechanism of the behaviors will be studied through the experiments using radiotracers or analytical apparatus such as ICP-AES.	Hokkaido University Laboratory of Nuclear and Environmental Materials, Graduate School of Engineering (Sapporo)	5	1	・Bachelor degree in science and technology ・Engaged in radiochemistry and/or radiation measurement
C - 10	Basic research on trace analysis methods based on mass spectrometry using local atomization and ionization	In this study, the elemental and isotopic analysis of trace elements in samples using mass spectrometry based on the local atomization and ionization of solid surfaces will be investigated.	Nagoya University Department of Applied Energy (Nagoya)	3	1	・Bachelor's degree in science and technology
C - 11	Thermal hydraulic experiments for nuclear severe accident	Experiments using simulated debris setup to determine the cooling characteristics of molten fuel debris in relation to reactor severe accidents are performed. Thereby, experience in thermal hydraulics experiments and knowledge of severe accident research will be obtained.	Kyoto University Institute for Integrated Radiation and Nuclear Sciences (Kumatori)	3	1-2	・Bachelor's or Master's degree in science and technology

C - 12	Study on interfacial transport mechanism of gas-liquid two-phase flow in a LWR (Light Water Reactor) fuel assembly	In this study, the flow characteristics of complex gas-liquid two-phase flow in a rod bundle geometry simulating the fuel assembly in a LWR (Light Water Reactor) will be systematically investigated by local measurements using multi-sensor probes. The obtained database of the local flow parameters will be used to elucidate the complex interfacial interaction and interfacial area concentration transport mechanism of gas-liquid two-phase flow and develop models that enable accurate prediction of gas-liquid two-phase flow characteristics in the fuel assembly.	Kyoto University Institute for Integrated Radiation and Nuclear Sciences (Kumatori)	5	2	・Bachelor's degree in science and technology
C - 13	Innovative nuclear reactor concept	Study on burnup and safety performances of various potential moderator materials for small modular HTGR design.	Kyushu University Department of Applied Quantum Physics and Nuclear Engineering, Faculty of Engineering (Fukuoka)	5	1	・Master's degree in nuclear engineering ・Engaged in nuclear reactor physics
C - 14	Internal dose assessment using an in-vivo counter and biokinetic models	In order to understand how to evaluate internal exposure dose, measurements of phantoms and computer simulations to calculate peak efficiency will be conducted. In addition, the influence of biokinetics of radionuclide on the internal exposure dose with in-vivo counter will be investigated by calculating biokinetics of some artificial radionuclides in human body.	Nagasaki University Center for Radiation Research and Education (Nagasaki)	5	1	・Bachelor's degree in science and technology ・Engaged in radiation protection, radiation measurement or dose assessment

C - 15	Optimizing Biological Dosimetry and Exploring Confounding Factors	Chromosome analysis is one of the biological dosimetry methods used worldwide, but there is room for improvement in handling large numbers of specimens and accelerating the process. In addition, because of the importance of determining radiosensitivity factors, we will optimize conventional evaluation methods and explore confounding factors of chromosome aberration formation.	Nagasaki University Department of Radiation Biology and Protection, Atomic Bomb Disease Institute (Nagasaki)	5	1	・Bachelor's or Master degree in biology or life science ・Engaged or applicant in biodosimetry

D: Nuclear Infrastructure Strengthening						
D - 1	Extraction and separation studies of diverse elements	Synthesize extractants used in solvent extraction and conduct extraction experiments with various elements. We will discuss the mechanism from the extraction results and aim to improve the extraction separation performance. The elements to be treated will focus on rare earth elements and noble metals.	Institute of Science Tokyo Laboratory for Zero-Carbon Energy (Ookayama)	up to 5	1	・Bachelor's degree in science or engineering ・Experience in chemistry-related experiments.
D - 2	Nuclear fuel cycle scenario simulation study	Quantitative evaluations of the introduction effect of various technologies in the nuclear fuel cycle (NFC), nuclear energy introduction scenario, and energy policy discussion will be done based on the NFC simulation, NMB. The applicant will start studying NFC and how the NFC simulator works. Then, based on the discussion and literature survey, NFC simulation will be implemented. For example, when a certain type of reactor is introduced, a quantitative discussion and consideration will be made on how to procure fuel, what kind of waste will be generated, and when it will happen. We can extend the study to energy policy, technological discussion, economy, nuclear security, economy, and social acceptance based on quantitative and material flow evaluation. If the study progresses well, the applicant can develop some of the new functionality to the NMB code.	Institute of Science Tokyo Laboratory for Zero-Carbon Energy (Ookayama)	up to 5	2	・Bachelor's degree in science or engineering ・If you know the computer language, you can do some code development, but it is not mandatory. The NMB is based on Excel and VBA, but knowledge of VBA is not mandatory.

MEXT Nuclear Research Exchange Program 2025 - Basic Researc Field Course

Code	Research Field	Summary of Research	Organization	Duration (Months)	Capacity (Persons)	Qualification for Application
BR-1	Research on education and human resource development contributing to fostering literacy on nuclear science and technology, with focusing on Naturally Occurring Radioactive Materials	Contributing to education and HRD that will lead to the fostering of nuclear science and technology literacy, with focusing on NORM (1) Development of education and HRD methods (2) Development of tools, modules and curricula that can be utilized in education and HRD (3) Practice of education and HRD and analysis of its effectiveness (4) Research on risk management and risk communication, etc.	The University of Tokyo Environmental Safety Management Group, Department of Environment Systems, Graduate School of Frontier Sciences (Hongo)	5	1	・Graduate or undergraduate degree in science, engineering or education. ・Experience in practice and planning of education and human resource development related to nuclear science and technology. ・The applicant should have basic knowledge of risk management, risk communication and radiation protection.
BR-2	Radiation safety and radiation protection	Participants belong to the supervisors' laboratory to conduct experiments and practices. The research area of each supervisor is as follows. ・ Radiation Chemistry, Radiation Biology, Radiation Protection ・ Radiation Physics, Radiation Measurement, Radiation Monitoring and Emergency Preparedness & Response ・ Radiation Biology, Radiation Protection ・ Radiation Detector, Radiation Measurement, especially Development of reactor neutrino monitor During this course, lectures are given to acquire overall and basic knowledge related nuclear energy. Also, an opportunity for technical visit to nuclear facilities in Fukui prefecture will be provided, if possible.	University of Fukui Research Institute of Nuclear Engineering (Tsuruga)	3	1-2	・Bachelor's degree in science and engineering

BR-3	Research of the environmental radioactivity and their measurement techniques related to radioactive materials	Research of the environmental radioactivity using mass sepctrometry, Ge detectors, liquid scintillation and development of measurement techinques using high performance mass-spectrometry for radionuclides.	Fukushima University Institute of Environmental Radioactivity (Fukushima)	3	1	・Bachelor's degree in science and technology ・Preffered : Chemistry or Environmental Chemistry
BR-4	Radioactive waste management	Participants belong to the supervisors' laboratory to conduct experiments and practices. The research area of each supervisor is as follows: ・Fuel Cycle, Nuclear Fuel Engineering for Fuel Cycle ・Decommissioning ・Waste Proposal, Decommissioning During this course, lectures are given to acquire overall and basic knowledge related nuclear energy. Also, an opportunity for technical visit to nuclear facilities in Fukui prefecture will be provided, if possible.	University of Fukui Research Institute of Nuclear Engineering (Tsuruga)	3	1-2	・Bachelor's degree in science and engineering
BR-5	Nuclear Reactor Physics	Nuclear data and numerical methods are verified through nuclear reactor core analyses	Hokkaido University Nuclear Reactor Engineering Laboratory, Graduate School of Engineering (Sapporo)	3	1	・Bachelor's degree in science and technology
BR-6	Nuclear engineering/Nuclear safety engineering ①	Participants belong to the supervisors' laboratory to conduct experiments and practices. The research area of each supervisor is as follows: ・Reactor Physics ・Nuclear Safety Engineering, Thermal hydraulics During this course, lectures are given to acquire overall and basic knowledge related nuclear energy. Criticality calculations, etc. will be performed using nuclear calculation codes to acquire knowledge of nuclear reactor physics and techniques for using nuclear calculation codes.	University of Fukui Research Institute of Nuclear Engineering (Tsuruga)	3	1-2	・Bachelor's degree in science and engineering

BR-7	Nuclear Engineering/ Nuclear Safety Engineering ②	Scrubbing equipment is used to reduce the release amounts of radioactive substances into the environment during nuclear power plant accidents. It is aim to understand the decontamination mechanism at scrubbing equipment using our laboratory equipment.	Hokkaido University Laboratory of Nuclear System and Safety Engineering, Graduate School of Engineering (Sapporo)	3	1-2	・Minimum requirement: Bachelor's degree in science and technology
BR-8	Nuclear Engineering/ Nuclear Safety Engineering ③	Aomori area, where HIT sites are located, has various kinds of large-scale nuclear facilities, such as nuclear power plants, facilities for re-processing nuclear fuel, uranium enrichment facilities, nuclear waste disposal sites, and the fusion energy directorate. Participants are expected to have on-site experiences and knowledge of the total nuclear systems by visiting these facilities and receiving lectures and experimental experiences described below. Main items to be discussed: Participants acquire basic knowledge through the activities such as Introduction to nuclear engineering (seminar) - Concepts of nuclear fission and power plants. Introduction to nuclear materials (seminar) - Basics of nuclear fuels and structural materials. Introduction to radiation measurement (seminar) - Concept of radiation detectors and radiation decay. Basic experiment - Measurement of gamma-rays from environmental materials. - Fabrication of a radiation detector using a GM tube. Visiting nuclear plants and research facilities.	Hachinohe Institute of Technology (Hachinohe)	3	2-3	・Bachelor's degree in science and engineering
BR-9	Fuels and materials engineering	Participants belong to the supervisors' laboratory to conduct experiments and practices. The research area of each supervisor is as follows. ・Nuclear Fuel, Analysis & Property of Nuclear Fuel Using Simulated Materials ・Cladding Material, Nuclear Materials, Irradiation Effects of Reactor Materials During this course, lectures are given to acquire overall and basic knowledge related nuclear energy. Also, an opportunity for technical visit to nuclear facilities in Fukui prefecture will be provided, if possible.	University of Fukui Research Institute of Nuclear Engineering (Tsuruga)	3	1-2	・Bachelor's degree in science and engineering

BR-10	Applied seismology & nuclear disaster prevention	Participants belong to the supervisor's laboratory to conduct experiments and practices. The research area of the supervisor is as follows. ・Earthquake & Tsunami During this course, lectures are given to acquire overall and basic knowledge related nuclear energy. The curriculum will include lectures and exercises focusing on strong motion prediction methods and microtremor surveys. Also, an opportunity for technical visit to nuclear facilities in Fukui prefecture will be provided, if possible.	University of Fukui Research Institute of Nuclear Engineering (Tsuruga)	3	1-2	・Bachelor's degree in science and engineering